New Insights on the Impact of Rotation and Current Profile on the Stability of the ITER Baseline Scenario in DIII-D

- **Low frequency spectroscopy shows approach to instability at low torque**
  - May be useful to sense instability in real-time
  - MARS-K modelling with collisionality and resistivity only partially reproduce amplitude increase
- **Deeper current minimum around q=2 associated with increased 2/1 instability**
  - Tearing instability (~1 kHz) may be correlated to the global kink measured by spectroscopy (20 Hz)

New experiments show that small changes in q_{95} may improve stability for Q=10 scenario